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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,470	05/15/2001	Hideo Adachi	971046A	8395

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ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER
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LIU, SHUWANG

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/854,470

**Applicant(s)**

ADACHI, HIDEO

**Examiner**

Shuwang Liu

**Art Unit**

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: "62" (see line 15, page 33). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Pinard et al. (US 5,815,811).

As shown in figures 1-3, Pinard et al. discloses:

(1) regarding claims 5, 7 and 9:

a radio communication network system (figure 1) and a method for controlling communication in the network, including a plurality of base station apparatuses (5) which have adjacent or overlapping radio areas, and one or more radio terminal apparatuses (2) which establish communication with any one of said base station apparatuses, wherein

each of said base station apparatuses comprises a load-condition transmission section which sends the state of load on each base station apparatus to said radio/terminal apparatus in the form of a probe response signal when receiving a probe signal from said radio terminal apparatus (column 5, line 40-column 6, line 13 and claim 4); and

said radio terminal apparatus comprises

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a throughput storage section (column 1, lines 40-46 and column 5, lines 45-51) which stores previously imparted necessary throughput as information;

a probe signal transmission section which sends a probe signal to search for a base station apparatus in the vicinity of said radio terminal apparatus (column 5, lines 21-29 and claim 1); and

a base station apparatus selection section (see item c in claim 1) which selects a base station apparatus whose load state is optimum on the basis of a load-state signal having been sent back from said base station apparatus in response to the probe signal transmitted from said probe signal transmission section as well as on the basis of the throughput stored in said throughput storage section, and which connects the thus-selected base station apparatus to said radio terminal apparatus (column 5, line 40-column 6, line 13 and claim 1).

(2) regarding claims 6, 8 and 10:

wherein if the state of load on said base station apparatus connected to said radio terminal apparatus has changed to an unsuitable throughput state stored in said throughput storage section, said base station selection section selects another base station apparatus whose load state is optimum on the basis of the load-state signal sent back from said base station apparatus in response to the probe signal transmitted from said probe signal transmission section as well as on the basis of the throughput stored in said throughput storage section, and connects the thus selected base station apparatus to said radio terminal apparatus (see claim 1).

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4. Claims 11, 13, 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Wright et al. (US 6,240,083).

As shown in figures 4, 17, 20 and 24, Wright et al. discloses:

(1) regarding claims 11 and 14:

a base station apparatus (24) for a radio communication network which establishes radio communication with one or more radio terminal apparatuses, said base station apparatus comprising:

a load state detection section for detecting the state of load on a radio communication network during the course of exchange of data between said base station apparatus and said radio terminal apparatus (column 22, lines 20-67); and

a modification section which dynamically charges the maximum back-off time for presenting collision between data, in accordance with the state of load detected by said load state detection section (column 23, line 10-column 24, line 43 and column 33 line 30-column 34, line 46).

(3) regarding claims 13 and 16:

a base station apparatus (24) for a radio communication network which establishes radio communication with one or more radio terminal apparatuses, said base station apparatus comprising:

a load state detection section for detecting the state of load on a radio communication network during the course of exchange of data between said base station apparatus and said radio terminal apparatus (column 22, lines 20-67); and

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a modification section which dynamically modifies the maximum length of a packet at the time of transmission of a frame in accordance with the state of load detected by said load state detection section (claim 4).

5. Claims 11, 12, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kermani et al. (US 6,118,788).

As shown in figures 1 and 2, Kermani et al. discloses:

(1) regarding claims 11 and 14:

a base station apparatus for a radio communication network which establishes radio communication with one or more radio terminal apparatuses, said base station apparatus comprising:

a load state detection section for detecting the state of load on a radio communication network during the course of exchange of data between said base station apparatus and said radio terminal apparatus (claim 5 and column 4, line 18-column 6, line 65); and

a modification section which dynamically charges the maximum back-off time for presenting collision between data, in accordance with the state of load detected by said load state detection section (claim 5 and column 4, line 18-column 6, line 65).

(2) regarding claims 12 and 15:

a base station apparatus for a radio communication network which establishes radio communication with one or more radio terminal apparatuses, said base station apparatus comprising:

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a load state detection section for detecting the state of load on a radio communication network during the course of exchange of data between said base station apparatus and said radio terminal apparatus (claim 5 and column 4, line 18-column 6, line 65); and

a modification section which determines whether to add a control frame when a frame of data is transmitted, in order to ensure a period during which a transmission path is occupied, in accordance with the state of load detected by said load state detection section, and which dynamically modifies the state of addition of the control frame (claim 5 and column 4, line 18-column 6, line 65).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (703) 308-9556.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (703) 305-4714.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306 (for Technology Center 2600 only)**



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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Shuwang Liu  
Primary Examiner  
Art Unit 2634

July 26, 2004